

10/07



#14

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/781,891D

DATE: 10/03/2002 P.6  
TIME: 14:04:16

Input Set : A:\13381.txt

Output Set: N:\CRF4\10032002\I781891D.raw

```

3 <110> APPLICANT: Delaney, William IV
4      Locarnini, Stephen Alister
5      Chen, Robert Yung Ming
6      Bartholomeusz, Angeline
7      Isom, Harriet
9 <120> TITLE OF INVENTION: An assay
11 <130> FILE REFERENCE: 2378750/EJH
13 <140> CURRENT APPLICATION NUMBER: 09/781,891D
14 <141> CURRENT FILING DATE: 2001-02-02
16 <150> PRIOR APPLICATION NUMBER: 60/179,948
17 <151> PRIOR FILING DATE: 2000-02-03
19 <160> NUMBER OF SEQ ID NOS: 22
21 <170> SOFTWARE: PatentIn version 3.0
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 23
25 <212> TYPE: DNA
26 <213> ORGANISM: Artificial Sequence
28 <220> FEATURE:
29 <223> OTHER INFORMATION: Description of Artificial Sequence:Primer
31 <400> SEQUENCE: 1
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35 <211> LENGTH: 20
36 <212> TYPE: DNA
37 <213> ORGANISM: Artificial Sequence
39 <220> FEATURE:
40 <223> OTHER INFORMATION: Description of Artificial Sequence:Primer
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43 tctctgacat actttccaat                                    20
45 <210> SEQ ID NO: 3
46 <211> LENGTH: 18
47 <212> TYPE: DNA
48 <213> ORGANISM: Artificial Sequence
50 <220> FEATURE:
51 <223> OTHER INFORMATION: Description of Artificial Sequence:Primer
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57 <211> LENGTH: 20
58 <212> TYPE: DNA
59 <213> ORGANISM: Artificial Sequence
61 <220> FEATURE:
62 <223> OTHER INFORMATION: Description of Artificial Sequence:Primer

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Input Set : A:\13381.txt

Output Set: N:\CRF4\10032002\I781891D.raw

64 <400> SEQUENCE: 4  
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67 <210> SEQ ID NO: 5  
68 <211> LENGTH: 181  
69 <212> TYPE: PRT  
70 <213> ORGANISM: Artificial Sequence  
72 <220> FEATURE:  
73 <223> OTHER INFORMATION: Description of Artificial Sequence:Reference HBV  
74 (Formula I)  
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83 <222> LOCATION: (17)..(17)  
84 <223> OTHER INFORMATION: X = I or P  
86 <220> FEATURE:  
87 <221> NAME/KEY: variant  
88 <222> LOCATION: (29)..(29)  
89 <223> OTHER INFORMATION: X = I or V  
91 <220> FEATURE:  
92 <221> NAME/KEY: variant  
93 <222> LOCATION: (35)..(35)  
94 <223> OTHER INFORMATION: X = S or D  
96 <220> FEATURE:  
97 <221> NAME/KEY: variant  
98 <222> LOCATION: (44)..(44)  
99 <223> OTHER INFORMATION: X = T or N  
101 <220> FEATURE:  
102 <221> NAME/KEY: variant  
103 <222> LOCATION: (46)..(46)  
104 <223> OTHER INFORMATION: X = R or N  
106 <220> FEATURE:  
107 <221> NAME/KEY: variant  
108 <222> LOCATION: (47)..(47)  
109 <223> OTHER INFORMATION: X = N or I  
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112 <221> NAME/KEY: variant  
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114 <223> OTHER INFORMATION: X = any amino acid  
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117 <221> NAME/KEY: variant  
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119 <223> OTHER INFORMATION: X = N  
121 <220> FEATURE:  
122 <221> NAME/KEY: variant  
123 <222> LOCATION: (50)..(50)  
124 <223> OTHER INFORMATION: X = N or Y or H

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Input Set : A:\13381.txt

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143 <222> LOCATION: (57)..(57)  
144 <223> OTHER INFORMATION: X = D or N  
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147 <221> NAME/KEY: variant  
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149 <223> OTHER INFORMATION: X = D or N  
151 <220> FEATURE:  
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154 <223> OTHER INFORMATION: X = S or Y  
156 <220> FEATURE:  
157 <221> NAME/KEY: variant  
158 <222> LOCATION: (65)..(65)  
159 <223> OTHER INFORMATION: X = N or Q  
161 <220> FEATURE:  
162 <221> NAME/KEY: variant  
163 <222> LOCATION: (71)..(71)  
164 <223> OTHER INFORMATION: X = L or M  
166 <220> FEATURE:  
167 <221> NAME/KEY: variant  
168 <222> LOCATION: (75)..(75)  
169 <223> OTHER INFORMATION: X = K or Q  
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172 <221> NAME/KEY: variant  
173 <222> LOCATION: (77)..(77)  
174 <223> OTHER INFORMATION: X = Y or F  
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178 <222> LOCATION: (79)..(79)  
179 <223> OTHER INFORMATION: X = R or W  
181 <220> FEATURE:  
182 <221> NAME/KEY: variant  
183 <222> LOCATION: (84)..(84)  
184 <223> OTHER INFORMATION: X = Y or L  
186 <220> FEATURE:

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Input Set : A:\13381.txt

Output Set: N:\CRF4\10032002\I781891D.raw

187 <221> NAME/KEY: variant  
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189 <223> OTHER INFORMATION: X = S or A  
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193 <222> LOCATION: (89)..(89)  
194 <223> OTHER INFORMATION: X = I or V  
196 <220> FEATURE:  
197 <221> NAME/KEY: variant  
198 <222> LOCATION: (95)..(95)  
199 <223> OTHER INFORMATION: X = I or L  
201 <220> FEATURE:  
202 <221> NAME/KEY: variant  
203 <222> LOCATION: (99)..(99)  
204 <223> OTHER INFORMATION: X = V or G  
206 <220> FEATURE:  
207 <221> NAME/KEY: variant  
208 <222> LOCATION: (114)..(114)  
209 <223> OTHER INFORMATION: X = C or L  
211 <220> FEATURE:  
212 <221> NAME/KEY: variant  
213 <222> LOCATION: (115)..(115)  
214 <223> OTHER INFORMATION: X = A or S  
216 <220> FEATURE:  
217 <221> NAME/KEY: variant  
218 <222> LOCATION: (116)..(116)  
219 <223> OTHER INFORMATION: X = V or M  
221 <220> FEATURE:  
222 <221> NAME/KEY: variant  
223 <222> LOCATION: (117)..(117)  
224 <223> OTHER INFORMATION: X = V or T  
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227 <221> NAME/KEY: variant  
228 <222> LOCATION: (118)..(118)  
229 <223> OTHER INFORMATION: X = R or C  
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232 <221> NAME/KEY: variant  
233 <222> LOCATION: (122)..(122)  
234 <223> OTHER INFORMATION: X = F or P  
236 <220> FEATURE:  
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238 <222> LOCATION: (125)..(125)  
239 <223> OTHER INFORMATION: X = L or V  
241 <220> FEATURE:  
242 <221> NAME/KEY: variant  
243 <222> LOCATION: (126)..(126)  
244 <223> OTHER INFORMATION: X = A or V  
246 <220> FEATURE:  
247 <221> NAME/KEY: variant

## RAW SEQUENCE LISTING

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Input Set : A:\13381.txt

Output Set: N:\CRF4\10032002\I781891D.raw

248 <222> LOCATION: (128)..(128)  
249 <223> OTHER INFORMATION: X = S or A  
251 <220> FEATURE:  
252 <221> NAME/KEY: variant  
253 <222> LOCATION: (133)..(133)  
254 <223> OTHER INFORMATION: X = V or L or M  
256 <220> FEATURE:  
257 <221> NAME/KEY: variant  
258 <222> LOCATION: (138)..(138)  
259 <223> OTHER INFORMATION: X = K or R  
261 <220> FEATURE:  
262 <221> NAME/KEY: variant  
263 <222> LOCATION: (139)..(139)  
264 <223> OTHER INFORMATION: X = S or T  
266 <220> FEATURE:  
267 <221> NAME/KEY: variant  
268 <222> LOCATION: (140)..(140)  
269 <223> OTHER INFORMATION: X = V or G  
271 <220> FEATURE:  
272 <221> NAME/KEY: variant  
273 <222> LOCATION: (141)..(141)  
274 <223> OTHER INFORMATION: X = Q or E  
276 <220> FEATURE:  
277 <221> NAME/KEY: variant  
278 <222> LOCATION: (143)..(143)  
279 <223> OTHER INFORMATION: X = L or S or R  
281 <220> FEATURE:  
282 <221> NAME/KEY: variant  
283 <222> LOCATION: (145)..(145)  
284 <223> OTHER INFORMATION: X = S or F  
286 <220> FEATURE:  
287 <221> NAME/KEY: variant  
288 <222> LOCATION: (147)..(147)  
289 <223> OTHER INFORMATION: X = F or Y  
291 <220> FEATURE:  
292 <221> NAME/KEY: variant  
293 <222> LOCATION: (148)..(148)  
294 <223> OTHER INFORMATION: X = T or A  
296 <220> FEATURE:  
297 <221> NAME/KEY: variant  
298 <222> LOCATION: (149)..(149)  
299 <223> OTHER INFORMATION: X = A or S  
301 <220> FEATURE:  
302 <221> NAME/KEY: variant  
303 <222> LOCATION: (150)..(150)  
304 <223> OTHER INFORMATION: X = V or I  
306 <220> FEATURE:  
307 <221> NAME/KEY: variant  
308 <222> LOCATION: (151)..(151)

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/09/781,891D

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TIME: 14:04:17

Input Set : A:\13381.txt  
Output Set: N:\CRF4\10032002\I781891D.raw

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; Xaa Pos. 2,17,29,35,44,46,47,48,49,50,52,53,54,55,56,57,60,61,65,71  
Seq#:5; Xaa Pos. 75,77,79,84,85,89,95,99,114,115,116,117,118,122,125,126  
Seq#:5; Xaa Pos. 128,133,138,139,140,141,143,145,147,148,149,150,151,152  
Seq#:5; Xaa Pos. 153,156,157,162,164,174,179  
Seq#:6; Xaa Pos. 2,3,4,5,8,10,13,18,19,21,24,26,27,30,33,40,44,45,46,47,49  
Seq#:6; Xaa Pos. 51,52,53,56,57,59,61,63,64,68,70,78,85,100,105,110,112,113  
Seq#:6; Xaa Pos. 114,118,119,120,122,125,126,127,128,131,133,134,136,137  
Seq#:6; Xaa Pos. 140,143,144,146,155,158,159,160,161,165,166,168,170,174  
Seq#:6; Xaa Pos. 177,178,182,183,184,185,187,189,192,193,194,197,198,200  
Seq#:6; Xaa Pos. 202,204,205,206,207,209,210,213,220,221,223,224,225  
Seq#:7; Xaa Pos. 3,10,11,15,21,27,45,48,59,62,65,76,86,96,134,153,164,182  
Seq#:7; Xaa Pos. 203,208,220,222,225,228,243,249,254  
Seq#:8; Xaa Pos. 2,49,52,53,55,56,65,69,75,195,209,211,222

## VERIFICATION SUMMARY

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Input Set : A:\13381.txt

Output Set: N:\CRF4\10032002\I781891D.raw

L:352 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0  
L:355 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:16  
L:358 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:32  
L:361 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:48  
L:364 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:64  
L:367 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:80  
L:371 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:96  
L:374 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:112  
L:377 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:128  
L:380 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:144  
L:383 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:160  
L:386 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:176  
L:869 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0  
L:872 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:16  
L:875 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:32  
L:878 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:48  
L:881 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:64  
L:884 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:80  
L:887 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:96  
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L:893 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:128  
L:896 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:144  
L:899 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:160  
L:902 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:176  
L:905 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:192  
L:908 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:208  
L:911 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:224  
L:1059 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0  
L:1062 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:16  
L:1065 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:32  
L:1068 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:48  
L:1071 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:64  
L:1074 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:80  
L:1083 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:128  
L:1086 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:144  
L:1089 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:160  
L:1092 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:176  
L:1095 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:192  
L:1098 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:208  
L:1101 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:224  
L:1104 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:240  
L:1181 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0  
L:1191 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:48  
L:1194 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:64  
L:1218 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:192  
L:1221 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:208